29 December 1997

EPA REGION I SUPERFUND PROGRAM
TRIP REPORT/CHECKLIST

Inspection Information

Site Name: Nickson Industries
Address: 8 West Street
Town: Southington **State:** Connecticut
CERCLIS No.: CTD982191736 **TDD No.:** 97-02-0013

Date of On-Site Reconnaissance: 5 June 1997
Time of On-Site Reconnaissance: 0930 to 1115 hrs
Weather Conditions: sunny, clear, 60°F

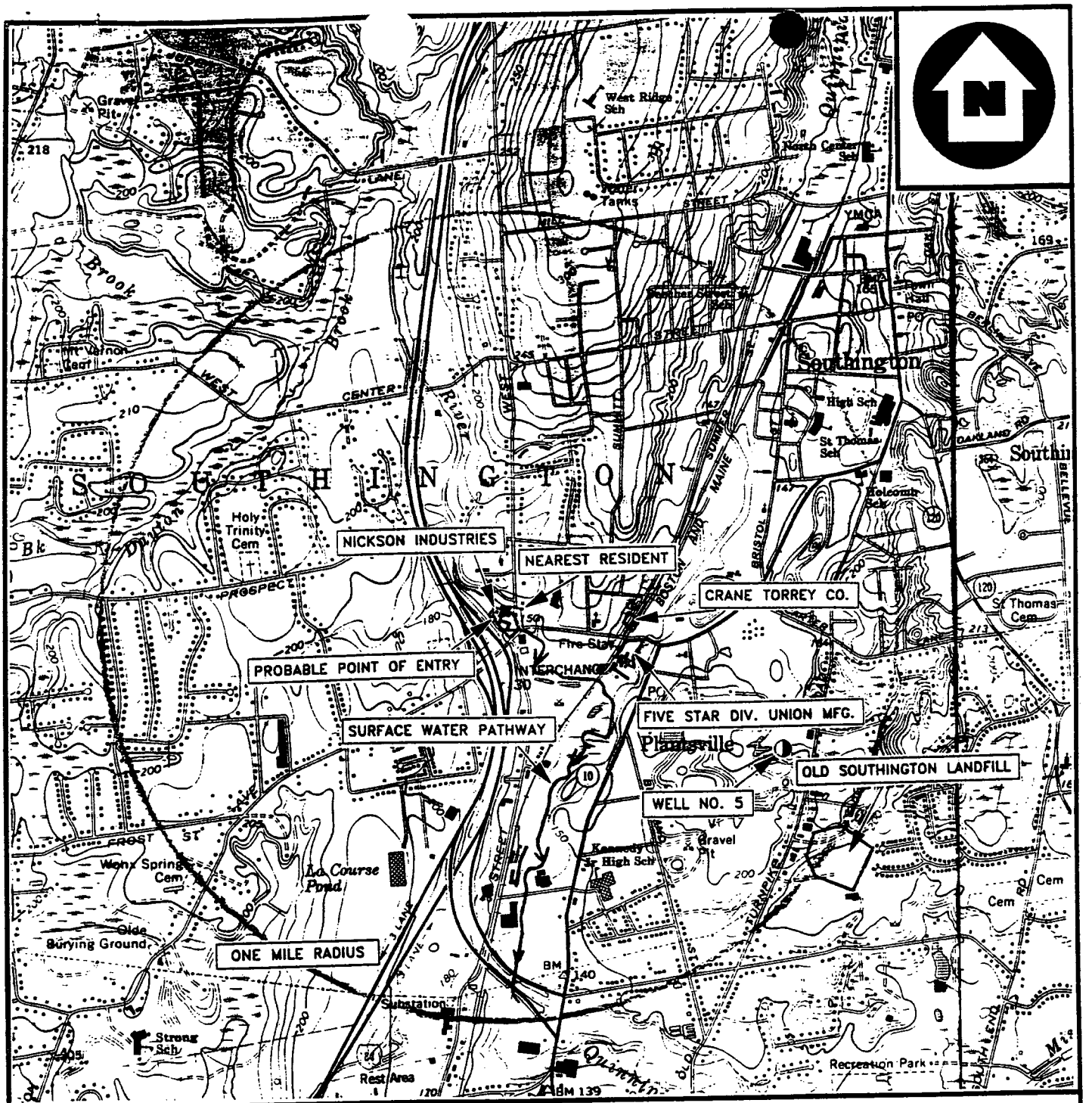
Date of Sampling Trip: 3 December 1997
Time of Sampling Trip: 0900 to 1330 hrs
Weather Conditions: sunny, clear, 45°F

Site Status at Time of Inspection: (X) ACTIVE
( ) INACTIVE
( ) ABANDONED

Comments:
The Nickson Industries facility was constructed circa 1850 and has historically been used by a variety of commercial and manufacturing businesses (Figure 1). The Nickson Industries property consists of a single-story building, three temporary storage trailers, asphalt paved areas, and landscaped lawn areas. The on-site building occupies approximately 25,000 square feet (ft^2) of the property (Figure 2). Currently, U.S. Filter Corporation Inc. (U.S. Filter) utilizes the property for the manufacture of water treatment systems.

Fifteen inactive settling pits are located in the western portion of the property arranged in succession leading from the on-site building to the Eightmile River. The pits were allegedly utilized by Allied Control Co., who occupied the property from approximately 1942 to 1971, for the primary treatment of plating wastewater prior to discharge to the Eightmile River.

On 28 December 1994, HRP Associates, Inc. (HRP) completed a Phase II Subsurface Investigation (Phase II) Report of the property to evaluate the presence and nature of on-site soil and groundwater contamination. As part of the Phase II, HRP advanced eight soil borings, installed five monitoring wells, and sampled soil and groundwater. Soil boring sampling results indicated the presence of trichloroethylene (TCE), tetrachloroethylene (PCE), cyanide, and leachable metals (barium, cadmium, chromium, and lead). Groundwater sampling results indicated the presence of PCE, vinyl chloride, methylene chloride, chloroform, and cadmium at levels above reference values.



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' x 7.5' U.S.G.S. QUADRANGLE(S):
SOUTHINGTON, CT 1968, PHOTOREVISED 1984
MERIDEN, CT 1968, PHOTOREVISED 1984

1 0 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

QUADRANGLE LOCATION

LOCATION MAP

NICKSON INDUSTRIES
WEST AND WEST MAIN STREETS
SOUTHINGTON, CONNECTICUT

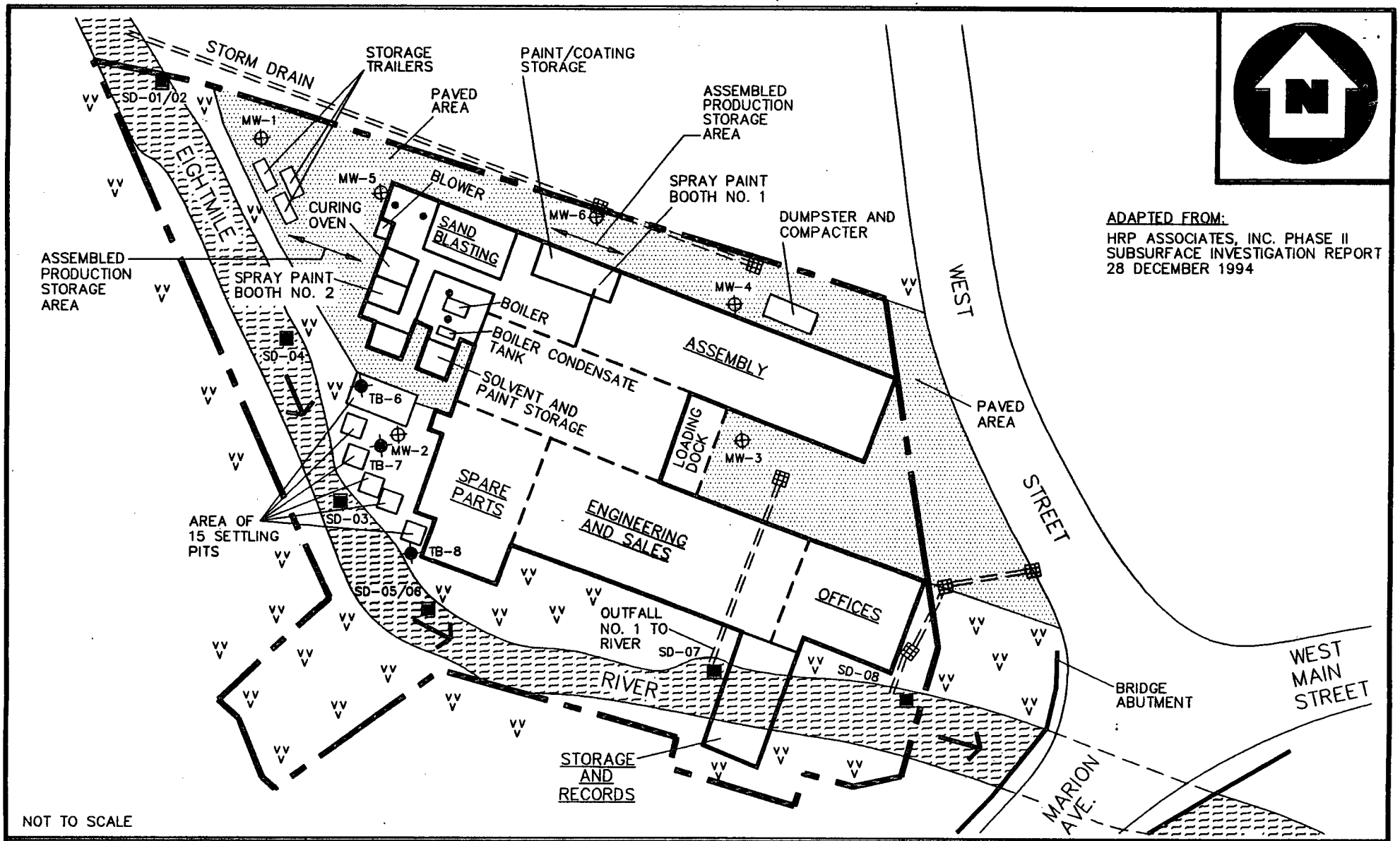
WESTON® MANAGERS DESIGNERS/CONSULTANTS

REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #	DRAWN BY:	DATE
97-02-0013	J. CHOW	4/16/97

FILE NAME: S:\97020013\NICKSON1.DWG

FIGURE 1



LEGEND

- SOIL BORING
- OVERBURDEN MONITORING WELL
- CATCHBASIN
- GRASS AREA
- SURFACE WATER FLOW DIRECTION
- FLOOR DRAIN
- PROPERTY LINE
- SEDIMENT SAMPLE LOCATION

SITE SKETCH

NICKSON INDUSTRIES
WEST AND WEST MAIN STREETS
SOUTHINGTON, CONNECTICUT

WESTON® MANAGERS DESIGNERS/CONSULTANTS
REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #	DRAWN BY:	DATE
97-02-0013	W. SHAW	6/27/97

FILE NAME: S:\97020013\FIG2.DWG

FIGURE 2

S:\97020013\NICKSON.TRP

Personnel Performing Inspection

	Names	Program
( ) EPA Region I:		
(✓) EPA Region I Contractor:	James S. Chow	START
	Taso Goujiamanis	START
	Daniel Keefe	START
	Steve Amirault	START
	Erin FitzPatrick	START
( ) State:		
( ) Other:		

Site Ownership-Current Owner

Name: Berkem, LLC
c/o Harold Berggren **Phone:** (803) 686-3913
Address: 27 Port Tack Road
Hilton Head Island, SC 29928

On-Site Sampling Trip: Brief Chronology

Details of the site visit are included in the site observations/concerns section.

On-site Reconnaissance: 5 June 1997

0930 hrs Roy F. Weston, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) personnel Mr. Chow and Mr. Goujiamanis arrived at the Nickson Industries property at 8 West Street. Mr. Chow, START Site Health and Safety Coordinator, completed calibration checks and documented site ambient background conditions with air monitoring instruments.

0940 hrs A brief meeting was held to discuss the purpose of the reconnaissance and specific details of the property. The meeting included START personnel, Mr. Harold Berggren (representing Berkem, LLC), Mr. David Losee (legal counsel for Berkem, LLC), Mr. Andy White (HRP, environmental consultant for Berkem, LLC), and Mr. Tom Brown (VP Operations, U.S. Filter, current property lessee and occupant).

On-Site Sampling Trip: Brief Chronology (Concluded)

1000 hrs START personnel conducted a tour of the facility and a reconnaissance of the property. START personnel were escorted and accompanied by Mr. Berggren, Mr. Losee, and Mr. White.

1115 hrs START personnel completed the on-site reconnaissance. START personnel left the property.

Sampling: 3 December 1997

0900 hrs START personnel Mr. Chow, Mr. Amirault, Mr. Keefe, and Ms. FitzPatrick arrived at the Nickson Industries property and met briefly with property representatives.

0915 hrs Mr. Chow, START Site Health and Safety Coordinator, completed calibration checks and established site ambient background conditions with air monitoring instruments. The remaining START personnel established site work zones (exclusion, contamination reduction, and clean zone).

1000 hrs START personnel began sampling activities (see Site Observations/Concerns section of this report for additional details).

1330 hrs START personnel completed sampling activities and departed the property.

Site Characteristics

Quantities/Extent/Details

( ) **Cylinders:**
(✓) **Drums:** During the 5 June 1997 START reconnaissance, two drums were observed inside a metal closet designated as a hazardous materials storage area. One drum contained waste paint and thinner, and the other drum contained waste oils.
( ) **Lagoons:**
(✓) **Tanks:** (✓) **Aboveground:** According to a 11 November 1994 HRP Phase I Update Report, a 10,000-gallon fuel oil aboveground storage tank (AST) had been decommissioned and was removed in 1988.
( ) **Below ground:**
( ) **Asbestos:**
( ) **Piles:**
( ) **Stained Soil:**
( ) **Sheens:**

Site Characteristics (Concluded)

Quantities/Extent/Details

( ) **Stressed Vegetation:**
( ) **Landfill:** ( ) **Leachate seeps**
(✓) **Population in Vicinity:** There are approximately 60 people employed by U.S. Filter on the property and no on-site residents.
(✓) **Distance to nearest residence:** The nearest residence is located approximately 0.1 miles northeast of the property at 29 West Street.
(✓) **Land use:** (✓) **Industrial** ( ) **Commercial** ( ) **Residential**
( ) **Rural** ( ) **Agricultural**
(✓) **Wells:** ( ) **Drinking:**
(✓) **Monitoring:** Six monitoring wells are located on the Nickson Industries property. HRP installed five monitoring wells (MW-01 through MW-05) in September 1994. No information is available regarding the sixth well.
(✓) **Other:** Fifteen inactive settling pits are located in the western portion of the property arranged in succession leading from the on-site building to the Eightmile River. The pits are reportedly concrete-lined and filled with sand and gravel. The pits were allegedly utilized by Allied Control Co. for the primary treatment of plating wastewaters prior to discharge to the Eightmile River.

On-site/Off-site Receptors

Comments/Details

(✓) **Drinking Water**
(✓) **Private:** The Town of Southington does not maintain information regarding locations of private drinking water wells. According to U.S. Census Bureau data, approximately nine people are served by private wells within 0.25-radial miles and 215 people are served by private wells within 1-radial mile.
(✓) **Municipal:** Municipal wells do not serve individuals located within 1-radial mile of the Nickson Industries property. The nearest municipal well, SWD Well No. 1a, is located in Southington 1.4 miles southeast of the Nickson Industries property and serves approximately 5,429 people.

(✓) **Groundwater:** Groundwater was estimated by HRP to flow in a southwesterly direction toward the Eightmile River at depths between 3 and 5 feet below ground surface (bgs).
(✓) **Unrestricted Access:** Pedestrian and vehicular access to the Nickson Industries property is unrestricted.
(✓) **Population in Proximity:** The U.S. Census Bureau estimates population within 0.25-radial miles to be 420 and the population within 1-radial mile to be 5,815.

On-site/Off-site Receptors (Concluded)

Comments/Details

(✓) Sensitive Ecosystem: According to the Connecticut Department of Environmental Protection (CT DEP) Natural Resource Center, there are no known State or Federally listed sensitive environments located within 0.25-radial miles of the property, and one State-endangered species habitat located within 1-radial mile. According to U.S. Fish and Wildlife wetland inventory maps, there are approximately 4 acres of wetlands located within 0.25-radial miles of the Nickson Industries property and 45 acres located within 1-radial mile.
(✓) Other: The Eightmile River bounds the eastern perimeter of the property. The nearest known school or day-care facility is the Kennedy Junior High School, located approximately 0.6 miles south-southeast of the Nickson Industries property.

Site Observations/Concerns

START personnel conducted an on-site reconnaissance to verify current property conditions on 5 June 1997, and conducted environmental sampling on 3 December 1997.

On-site Reconnaissance: 5 June 1997

The Nickson Industries property is located at 8 West Street (at the intersection of West and West Main Streets) in Southington, Hartford County, Connecticut. The Nickson Industries property consists of a 2.1-acre parcel. The Nickson Industries property is zoned industrial and is located in a primarily commercial and industrial section of Southington. The property is bounded by local businesses to the north; West Street and undeveloped commercial property to the east; and the Eightmile River, local businesses, and Interstate 84 to the south and west.

An inspection of the property by personnel from the State of Connecticut in 1965 documented that the property had been occupied by the Allied Control Co. since 1942. The inspection noted that relays and solenoid valves were manufactured at the property and that manufacturing processes involved plating, fabricating, assembly, machining, heating, and painting. Wastes generated from plating operations were noted to contain acids, cyanides, alkalis, nickel, copper, tin, cadmium, chromium, gold, and rhodium. Industrial wastes were noted to be discharged to the Eightmile River and the ground surface. No mention of the fifteen inactive settling pits was made in the inspection. During the on-site reconnaissance, START personnel noted the outline of approximately nine of the reported 15 settling pits. START personnel observed that they were filled and covered.

An industrial survey of the property by the CT DEP in 1977 documented that Nickson Industries had occupied the property since 1971. The inspection noted that automobile muffler clamps were manufactured at the property and that manufacturing processes involved wire drawing, cutting, thread rolling, bending, and tumbling. No information regarding wastes generated by Nickson Industries was recorded. START personnel did not observe any materials or wastes of this nature during the on-site reconnaissance.

Site Observations/Concerns (Continued)

From 1982 to the present, U.S. Filter and its predecessor Penfield, Inc. have utilized the property for the manufacture of water treatment systems. A 1983 CT DEP Industrial Survey of the property noted that Penfield, Inc. manufactured industrial water filters, demineralizers, and pollution control systems. The survey also noted that manufacturing processes included polymer coating of tanks, painting, welding, machining, hydrostatic testing of tanks, electrical assembly, and sand blasting. The only wastes generated by Penfield, Inc. were observed by CT DEP personnel to be methyl ethyl ketone and paint solvents which were disposed of by evaporation. No off-site disposal of hazardous wastes was documented.

In December 1994, HRP completed a Phase II Subsurface Investigation Report of the property to evaluate the presence of on-site soil and groundwater contamination. During this study, eight soil borings were advanced, five monitoring wells were installed, and soil and groundwater samples were collected. Analytical results indicated elevated levels of TCE, PCE, and cyanide in soil, and PCE, vinyl chloride, methylene chloride, chloroform, and cadmium in groundwater. During the on-site reconnaissance, START personnel observed the five groundwater monitoring wells installed by HRP, as well as a sixth monitoring well. No information was available regarding the sixth monitoring well.

Sampling Activities: 3 December 1997

Table 1 provides a summary of the sediment samples collected at the Nickson Industries. All sampling activities were conducted in accordance with the approved Task Work Plan, dated 3 November 1997, with the exception of the relocation of SD-03, SD-04, SD-05, and SD-07. These sample locations were moved due to site conditions and to better evaluate potential impacts to the Eightmile River from the property.

All sediment samples (SD-01 through SD-08) were collected along the Eightmile River. Sediment samples were collected from areas upstream of and adjacent to the Nickson Industries property. Headspace screening of all sediment samples was conducted using a photoionization detector (PID); no readings above background were detected. Reference sample SD-01/SD-02 was collected from an area immediately upstream of the most upstream probable point of entry (PPE) location. Sediment sample SD-03 was collected from the proposed sampling location for SD-04, approximately 200 feet downstream of the PPE and adjacent to the inactive settling pits.

SD-04 was collected in the proposed sampling location for SD-03, approximately 150 feet downstream of the PPE, and adjacent to active areas of the on-site facility. Sediment sample SD-05/SD-06 was collected approximately 255 feet downstream of the PPE and just downstream of the inactive settling pits. Sediment sample SD-07 was collected approximately 345 feet downstream of the PPE and downstream of Outfall Pipe No. 1. This location is approximately 20 feet farther downstream than the proposed sampling location in the Task Work Plan. Sediment sample SD-08 was collected immediately upstream of the southeast property boundary, but downstream of the PPE, outfall pipes, and inactive settling pits.

Site Observations/Concerns (Concluded)

At the request of the property owner, samples collected by START were split, with the second set of samples provided to a representative of HRP, environmental consultants for the property owner, along with a sampling location plan. At the end of the sampling event, a chain-of-custody was completed to document the transfer of the samples to HRP.

Report prepared by: Erin FitzPatrick
Affiliation: START
Date: 29 December 1997

Table 1

Sample Summary: Nickson Industries
Samples Collected by START on 3 December 1997

Sample Location No.	Traffic Report No.	Time (hrs)	Remarks	Sample Depth	Sample Source
MATRIX: Sediment					
SD-01	DAFH39	1245	Grab	3-12 inches	Grab sample collected immediately upstream of most upstream PPE location, to establish reference conditions. Material is reddish-brown, gravelly, fine-to-coarse sand. Temperature = 6° C, pH = 6.5, conductivity = 125 μohms.
SD-02	DAFH40	1245	Grab	3-12 inches	Duplicate sample of SD-01, collected for quality control (metals only).
SD-03 (MS/MSD)	DAFH41	1130	Grab	3-12 inches	Grab sample collected from approximately 200 feet downstream of most upstream PPE location and adjacent to inactive settling pits. Material is reddish-brown, silty, gravelly, fine-to-coarse sand. Temperature = 6° C, pH = 7, conductivity = 130 μohms.
SD-04	DAFH42	1230	Grab	3-12 inches	Grab sample collected from approximately 150 feet downstream of most upstream PPE location and adjacent to active areas of on-site facility. Material is reddish-brown, fine-to-coarse sand and silt. Temperature = 6° C, pH = 6.5, conductivity = 125 μohms.
SD-05	DAFH43	1100	Grab	3-12 inches	Grab sample collected approximately 255 feet downstream of most upstream PPE location and adjacent to inactive settling pits. Material is reddish-brown, silty, gravelly sand, trace organics. No odors or stains noted. Temperature = 6° C, pH = 6.5, conductivity = 130 μohms.
SD-06	DAFH44	1100	Grab	3-12 inches	Duplicate of SD-05, for quality control purposes
SD-07	DAFH45	1035	Grab	3-12 inches	Grab sample collected from approximately 345 feet downstream of most upstream PPE location, adjacent to outflow pipe. Material is reddish-brown, silty, gravelly sand. No odors or stains noted. Temperature = 4° C, pH = 7, conductivity = 120 μohms.

Table 1

Sample Summary: Nickson Industries
Samples Collected by START on 3 December 1997
(Concluded)

Sample Location No.	Traffic Report No.	Time (hrs)	Remarks	Sample Depth	Sample Source
SD-08	DAFH56	1000	Grab	3-12 inches	Grab sample collected immediately upstream of the southeast property boundary, downstream of PPE, downstream of inactive settling pits and catchbasin outfall pipe. Material is gray, silty sand. Temperature = 5° C, pH = 7, conductivity = 130 μohms.
MATRIX: Aqueous					
RB-01	DAFH47	1200	Grab	NA	Sediment sampling equipment rinsate blank sample, collected for quality control.
TB-01	DAFH48	0730	Grab	NA	Trip blank collected for quality control.
MATRIX: Performance Evaluation Samples					
PE-0004860	DAFH49	NA	Grab	NA	Aqueous Performance Evaluation sample for low to medium concentration VOCs.
PE-0009116	DAFH50	NA	Grab	NA	Aqueous Performance Evaluation sample for low to medium concentration SVOCs.
PE-0016507	DAFH51	NA	Grab	NA	Aqueous Performance Evaluation sample for low to medium concentration pesticide/PCBs.
PE-TT0101	DAFH52	NA	Grab	NA	Solid Performance Evaluation sample for low to medium concentration metals.
PE-0000560	DAFH53	NA	Grab	NA	Aqueous Performance Evaluation sample for low to medium concentration cyanide.

Notes:
MS/MSD = Matrix Spike/Matrix Spike Duplicate.
VOCs = Volatile organic compounds.
SVOCs = Semivolatile organic compounds.
PCBs = Polychlorinated biphenyls.
PPE = Probable point of entry.
NA = Not applicable.
° C = Degrees Celsius.
μohm = Microhm.